ABSTRACT

A magnetic powder composed primarily of Fe that has been surface-treated with a silane coupling agent, which magnetic powder is characterized in that it contains Co such that Co/Fe expressed in atomic percent is 20 - 50 at.%, Al such that Al/Fe expressed in atomic percent is 5 - 30 at.%, and one or more rare earth elements R (including Y) such that R/Fe expressed in atomic percent is 4 - 20 at.%, and has average particle diameter of smaller than 80 nm, TAP density of 0.7 g/cm^3 or greater, ignition point of $165 \, ^{\circ}\text{C}$ or higher, and oxygen content of $26 \, \text{wt}\%$ or less.